

SEQLIST.TXT
SEQUENCE LISTING

<110> Albert, Lai

<120> NOVEL SPLICE VARIANTS OF HUMAN Dkk1

<130> PP023359.0003

<140> 10/574182

<141> 2007-05-31

<150> PCT/US04/34256

<151> 2004-09-30

<150> 60/507682

<151> 2003-09-30

<160> 26

<170> FastSEQ for windows Version 4.0

<210> 1

<211> 819

<212> DNA

<213> homo sapien

<400> 1

```

atggggagaag cctccccacc tgcccccgca aggcggcatc tgctggctct gctgctgctc 60
ctctctaccc tggatgatccc ctccgctgca gctcctatcc atgatgctga cgcccaagag 120
agctccttgg gtctcacagg cctccagagc ctactccaag gcttcagccg acttttctcg 180
aaaggtaacc tgcttcgggg catagacagc ttatttctctg ccccatgga cttccggggc 240
ctccctggga actaccacaa agaggagaac caggagcacc agctggggaa caacaccctc 300
tccagccacc tccagatcga caagaggacc gacaacaaga caggagaggt gctgatctcc 360
gagaatgtgg tggcatccat tcaaccagcg gaggggagct tcgaggggtga tttgaaggta 420
cccaggatgg aggagaagga ggcccttgga cccatccaga aggccacgga cagcttccac 480
acagaactcc atccccgggt ggccttctgg atcattaagc tgccacggcg gaggtccac 540
caggatgccc tggaggggcg ccactggctc agcgagaagc gacaccgcct gcaggccatc 600
cgggatggac tccgcaaggg gacccacaag gacgtcctag aagaggggac cgagagctcc 660
tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag gccctctcgg 720
cagctgtagg ggtggggacc ggggagcacc tgctgtagc ccccatcaga ccctgcccc 780
agcaccatat ggaaataaag ttctttctta catctaaca 819

```

<210> 2

<211> 242

<212> PRT

<213> homo sapien

<400> 2

```

Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1          5          10          15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
 20          25          30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35          40          45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50          55          60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65          70          75          80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85          90          95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Arg Thr Asp Asn

```

SEQLIST.TXT

```

      100      105      110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
      115      120      125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
      130      135      140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
      145      150      155      160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
      165      170      175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
      180      185      190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
      195      200      205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
      210      215      220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
      225      230      235      240
Gln Leu

```

<210> 3
 <211> 733
 <212> DNA
 <213> homo sapien

```

<400> 3
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctgggtga tccccctccgc tgcagctcct atccatgatg ctgacgccca 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt 480
ccacacagaa ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcgagggtc 540
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc 600
catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
ctcctccac tccaggctgt cccccgaaa gaccactta ctgtacatcc tcaggccctc 720
tcggcagctg tag 733

```

<210> 4
 <211> 242
 <212> PRT
 <213> homo sapien

```

<400> 4
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
100 105 110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125

```

SEQLIST.TXT

```

Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
130 135 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
145 150 155 160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
165 170 175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
180 185 190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
210 215 220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225 230 235 240
Gln Leu

```

<210> 5
 <211> 733
 <212> DNA
 <213> homo sapien

```

<400> 5
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gtcctctctt accctgggtga tccccctccac tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
ggtaccagg atggaggaga aggaggccct ggtaccatc cagaaggcca cggacagctt 480
ccacacagaa ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcggagggtc 540
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc 600
catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
ctcctcccac tccaggctgt cccccgaaa gaccactta ctgtacatcc tcaggccctc 720
tcggcagctg tag 733

```

<210> 6
 <211> 242
 <212> PRT
 <213> homo sapien

```

<400> 6
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
100 105 110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
130 135 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His

```

SEQLIST.TXT

```

145      150      155      160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
      165      170      175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
      180      185      190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
      195      200      205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
      210      215      220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
      225      230      235      240
Gln Leu

```

<210> 7
 <211> 733
 <212> DNA
 <213> homo sapien

```

<400> 7
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctgggtga tcccctccac tgcagctcct atccatgatg ctgacgccca 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt 480
ccacacagaa ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcgagggtc 540
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc 600
catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
ctcctcccac tccaggctgt cccccgaaa gaccactta ctgtacatcc tcaggccctc 720
tcggcagctg tag 733

```

<210> 8
 <211> 242
 <212> PRT
 <213> homo sapien

```

<400> 8
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1      5      10      15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
      20      25      30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
      35      40      45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
      50      55      60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
      65      70      75      80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
      85      90      95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
      100      105      110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
      115      120      125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
      130      135      140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
      145      150      155      160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
      165      170      175

```

SEQLIST.TXT

Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
 180 185 190
 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
 195 200 205
 His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
 210 215 220
 Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
 225 230 235 240
 Gln Leu

<210> 9
 <211> 733
 <212> DNA
 <213> homo sapien

<400> 9
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
 gctcctctct accctggtga tccccctccac tgcagctcct atccatgatg ctgacgcccc 120
 agagagctcc ttgggtctca caggcctcca gaggcctact caaggcttca gccgactttt 180
 cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
 gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
 cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
 ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
 ggtacccagg atggaggaga aggaggccct ggtaccatc cagaaggcca cggacagctt 480
 ccacacagaa ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcgagggtc 540
 ccaccaggat gccctggagg gcagccactg gctcagcgag aagcgacacc gcctgcaggc 600
 catccgggat ggactccgca aggggaccca caaggacgtc ctaaaagagg ggaccgagag 660
 ctctctccac tccaggctgt cccccgaaa gaccactta ctgtacatcc tcaggccctc 720
 tcggcagctg tag 733

<210> 10
 <211> 242
 <212> PRT
 <213> homo sapien

<400> 10
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50 55 60
 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65 70 75 80
 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85 90 95
 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
 100 105 110
 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
 115 120 125
 Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
 130 135 140
 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
 145 150 155 160
 Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
 165 170 175
 Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu Ser Glu
 180 185 190
 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr

SEQLIST.TXT

195 200 205
 His Lys Asp Val Leu Lys Glu Thr Glu Ser Ser Ser His Ser Arg
 210 215 220
 Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
 225 230 235 240
 Gln Leu

<210> 11
 <211> 733
 <212> DNA
 <213> homo sapien

<400> 11
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
 gctcctctct accctgggtga tccccctccac tgcagctcct atccatgatg ctgacgcccc 120
 agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
 cctgaaagggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
 gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
 cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
 ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
 ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt 480
 ccacacagaa ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcggagggtc 540
 ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc 600
 catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
 ctctctccac tccaggctgt cccccgaaa gaccactta ctgtacatcc tcaggccctc 720
 tcggcagctg tag 733

<210> 12
 <211> 242
 <212> PRT
 <213> homo sapien

<400> 12
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50 55 60
 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65 70 75 80
 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85 90 95
 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
 100 105 110
 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
 115 120 125
 Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
 130 135 140
 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
 145 150 155 160
 Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
 165 170 175
 Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
 180 185 190
 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
 195 200 205
 His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
 210 215 220

SEQLIST.TXT

Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
 225 230 235 240
 Gln Leu

<210> 13
 <211> 640
 <212> DNA
 <213> homo sapien

<400> 13
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
 gctcctctct accctgggtga tccccctccgc tgcagctcct atccatgatg ctgacgcccc 120
 agagagctcc ttgggtctca caggcctcca gaggctactc caaggcttca gccgactttt 180
 cctgaaagggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
 gggcctccct ggggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
 cctctccagc cacctccaga tcgacaagggt acccaggatg gaggagaagg aggccctggt 360
 acccatccag aaggccacgg acagcttcca cacagaactc catccccggg tggccttctg 420
 gatcattaag ctgccacggc ggaggtccca ccaggatgcc ctggaggggc gccactggct 480
 cagcgagaag cgacaccgcc tgcaggccat ccgggatgga ctccgcaagg ggaccacaa 540
 ggacgtccta gaagagggga ccgagagctc ctccactcc aggctgtccc cccgaaagac 600
 ccacttactg tacatcctca ggcctctctg gcagctgtag 640

<210> 14
 <211> 211
 <212> PRT
 <213> homo sapien

<400> 14
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50 55 60
 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65 70 75 80
 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85 90 95
 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Val Pro Arg Met
 100 105 110
 Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe
 115 120 125
 His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro
 130 135 140
 Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser
 145 150 155 160
 Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly
 165 170 175
 Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser
 180 185 190
 Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser
 195 200 205
 Arg Gln Leu
 210

<210> 15
 <211> 640
 <212> DNA

SEQLIST.TXT

<213> homo sapien

<400> 15

```
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctgggtga tccccctccg tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cacctccaga tcgacaaggt acccaggatg gaggagaagg aggccctggt 360
acccatccag aaggccacgg acagcttcca cacagaactc catccccggg tggccttctg 420
gatcattaag ctgccacggc ggaggtccca ccaggatgcc ctggagggcg gccactggct 480
cagcgagaag cgacaccgcc tgcaggccat ccgggatgga ctccgcaagg ggacccacaa 540
ggacgtccta gaagaggaga ccgagagctc ctcccactcc aggctgtccc cccgaaagac 600
ccacttactg tacatcctca ggccctctcg gcagctgtag 640
```

<210> 16

<211> 211

<212> PRT

<213> homo sapien

<400> 16

```
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1          5          10          15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
 20          25          30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35          40          45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50          55          60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65          70          75          80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85          90          95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Val Pro Arg Met
100          105          110
Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe
115          120          125
His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro
130          135          140
Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser
145          150          155          160
Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly
165          170          175
Thr His Lys Asp Val Leu Glu Glu Glu Thr Glu Ser Ser Ser His Ser
180          185          190
Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser
195          200          205
Arg Gln Leu
210
```

<210> 17

<211> 499

<212> DNA

<213> homo sapien

<400> 17

```
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctgggtga tccccctccg tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaagta ccaggatgg aggagaagga ggcccttggt cccatccaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggcccttctg atcattaagc tgccacggcg 300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
```


SEQLIST.TXT

gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag 499

<210> 18
<211> 164
<212> PRT
<213> homo sapien

<400> 18
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
50 55 60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65 70 75 80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85 90 95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100 105 110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115 120 125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130 135 140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145 150 155 160
Ser Arg Gln Leu

<210> 19
<211> 499
<212> DNA
<213> homo sapien

<400> 19
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tctgtctgct 60
gtcctctct accctgggtga tcccctccgc tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gaggcctact caaggcttca gccgactttt 180
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggccttctgg atcattaagc tgccacggcg 300
gaggtccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag 499

<210> 20
<211> 164
<212> PRT
<213> homo sapien

<400> 20
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg

SEQLIST.TXT

```

50          55          60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65          70          75          80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85          90          95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100         105         110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115         120         125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130         135         140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145         150         155         160
Ser Arg Gln Leu

```

<210> 21
 <211> 499
 <212> DNA
 <213> homo sapien

```

<400> 21
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gtctctctct accctgggtga tccccctccg tgcagctcct atccatgatg ctgacgccc 120
agagagctcc ttgggtctca caggcctcca gaggctactc caaggcttca gccgactttt 180
cctgaaagta ccaggatggg aggagaagga ggccctggta cccatccaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggcccttctgg atcattaagc tgccacggcg 300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
gcaggccatc cgggatggac tccgcaaggg gaccacaag gacgtcctag aagagggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag
499

```

<210> 22
 <211> 164
 <212> PRT
 <213> homo sapien

```

<400> 22
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1          5          10          15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20         25         30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35         40         45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
50         55         60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65         70         75         80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85         90         95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100        105        110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115        120        125
Gly Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His
130        135        140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145        150        155        160
Ser Arg Gln Leu

```

SEQLIST.TXT

<210> 23
<211> 499
<212> DNA
<213> homo sapien

<400> 23
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tcccctccgc tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggcccttctgg atcattaagc tgccacggcg 300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag 499

<210> 24
<211> 164
<212> PRT
<213> homo sapien

<400> 24
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
50 55 60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65 70 75 80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85 90 95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100 105 110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115 120 125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130 135 140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145 150 155 160
Ser Arg Gln Leu

<210> 25
<211> 499
<212> DNA
<213> homo sapien

<400> 25
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tcccctccac tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggcccttctgg atcattaagc tgccacggcg 300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag 499

<210> 26

SEQLIST.TXT

<211> 164

<212> PRT

<213> homo sapien

<400> 26

```

Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1      5      10      15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
 20      25      30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35      40      45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
 50      55      60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
 65      70      75      80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
 85      90      95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100      105      110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115      120      125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130      135      140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145      150      155      160
Ser Arg Gln Leu

```